

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-84. (Cancelled)

85. (New) A headlamp comprising:

at least one light source;

at least one reflector section;

at least one shield;

at least one lens for a long-distance illumination without glaring effects on concealment of the light source and reflecting surfaces; and

at least one semi-shutter, which is used for covering upper half of said lens in order not to reach the light rays which are coming from said light source, from said reflector sections and/or and from all reflecting surfaces inside the headlamp to eye level of oncoming traffic users,

wherein the locations of said shield, said semi-shutter and focal points of lens are so adjusted that the light rays are directed towards the lower half-lens through an opening placed between the upper edge of the shield and lower edge of the semi-shutter and lower half of the lens which projects light rays to only road surfaces.

86. (New) The headlamp according to claim 85, wherein said shield is a movable part and it is disposed an angle of approximately 45° with the XX horizontal plane and its inner surface is reflective.

87. (New) The headlamp according to claim 85, wherein bottom section of said semi-shutter piece and/or upper edge of said shield is designed to create a cut-off section in the form of preferred cut-off type.

88. (New) The headlamp according to claim 85, wherein said half lens which is used for projecting light rays is placed as a front and/or rear half lens according to its location of usage and preferred embodiment.

89. (New) The headlamp according to claim 85, used in double reflector groups with double light pathways, or in triple reflector groups with triple light pathways (clover-leaf shape), or in more reflector groups with more light pathways.

90. (New) The headlamp according to claim 85, wherein said a full lens or half lens is used in place of said lens.

91. (New) The headlamp according to claim 85, wherein said semi-shutter is a movable part and disposed an angle so as to project light rays coming from said shield to lower half lens.

92. (New) The headlamp according to claim 85, wherein inner and/or outer surface of said semi-shutter is reflective.

93. (New) The headlamp according to claim 85, wherein said lens is placed between the reflector sections and said mirror-reflectors, using one or more mirror-reflector within this design operating according to the indirect illumination principle.

94. (New) The headlamp according to claim 85, wherein said lens is a plano convex type having a flat back surface and an aspherical front surface or a spherical, cylindrical shape or a combination thereof, or a Fresnel lens or any other type.

95. (New) A headlamp comprising:
at least one light source;
at least one reflector section;

at least one inclined reflective shield;
at least one lens with a long-distance illumination without glaring effects on concealment of the light source and reflecting surfaces;
at least one reflective surface disposed front of said reflector section; and
at least one semi-shutter which is used for covering upper half of said lens in order not to reach the light rays which are coming from said light source, from said reflector section and from all reflecting surfaces inside the headlamp to eye level of oncoming traffic users,
wherein said inclined shield and reflective surface are so adjusted that the reflective surface reflects the light rays coming from the reflective shield towards the lower half-lens.

96. (New) The headlamp according to claim 95, wherein one or more of said at least one reflective surface is preferably disposed and it is flat or concave and used to direct the light rays falling from said shield onto itself to the lower half lens.

97. (New) The headlamp according to claim 95, wherein said shield is a movable part and it is disposed an angle of approximately 45° with the XX horizontal plane and its inner surface is reflective.

98. (New) The headlamp according to claim 95, wherein bottom section of said semi-shutter piece and/or upper edge of said shield is designed to create a cut-off section in the form of preferred cut-off type.

99. (New) The headlamp according to claim 95, wherein the reflection angles of inner surface of said inclined reflective shield is adjusted to reflect the light rays in accordance with said whole reflective shields, in case there are more than one reflective shield.

100. (New) The headlamp according to claim 95, wherein said half lens which is used for projecting light rays is placed as a front and/or rear half lens according to its location of usage and preferred embodiment.

101. (New) The headlamp according to claim 95, used in double reflector groups with double light pathways, or in triple reflector groups with triple light pathways (clover-leaf shape), or in more reflector groups with more light pathways.

102. (New) The headlamp according to claim 95, wherein said a full lens or half lens is used in place of said lens.

103. (New) The headlamp according to claim 95, wherein said semi-shutter is a movable part and disposed an angle so as to project light rays coming from said shield to lower half lens.

104. (New) The headlamp according to claim 95, wherein inner and/or outer surface of said semi-shutter is reflective.

105. (New) The headlamp according to claim 95, wherein said lens is placed between the reflector sections and said mirror-reflectors, using one or more mirror-reflector within this design operating according to the indirect illumination principle.

106. (New) The headlamp according to claim 95, wherein said lens is a plano convex type having a flat back surface and an aspherical front surface or a spherical, cylindrical shape or a combination thereof, or a Fresnel lens or any other type.

107. (New) A headlamp comprising:
at least one light source;
at least one reflector section;
at least one lens with a long-distance illumination without glaring effects on concealment of the light source and reflecting surfaces; and

at least one semi-shutter, which is used for covering upper half of said lens in order not to reach the light rays which are coming from said light source, from said reflector sections and from all reflecting surfaces inside the headlamp to eye level of oncoming traffic users,

wherein the locations of the lower edges of the reflector section and semi-shutter is so adjusted that the light rays are directed towards the lower half-lens through an opening placed between the reflector section and lower edge of the semi-shutter and lower half of the lens which projects light rays to only road surfaces.

108. (New) The headlamp according to claim 107, wherein said half lens which is used for projecting light rays is placed as a front and/or rear half lens according to its location of usage and preferred embodiment.

109. (New) The headlamp according to claim 107, used in double reflector groups with double light pathways, or in triple reflector groups with triple light pathways (clover-leaf shape), or in more reflector groups with more light pathways.

110. (New) The headlamp according to claim 107, wherein said a full lens or half lens is used in place of said lens.

111. (New) The headlamp according to claim 107, wherein said semi-shutter is a movable part and disposed an angle so as to project light rays coming from said shield to lower half lens.

112. (New) The headlamp according to claim 107, wherein inner and/or outer surface of said semi-shutter is reflective.

113. (New) The headlamp according to claim 107, wherein said lens is placed between the reflector sections and said mirror-reflectors, using one or more mirror-reflector within this design operating according to the indirect illumination principle.

114. (New) The headlamp according to claim 107, wherein said lens is a plano convex type having a flat back surface and an aspherical front surface or a spherical, cylindrical shape or a combination thereof, or a Fresnel lens or any other type.

115. (New) A headlamp comprising:
at least one light source;
at least one reflector section;
at least one lens with a long-distance illumination without glaring effects on concealment of the light source and reflecting surfaces;
at least one mirror reflector; and
at least one semi-shutter, which is used for covering upper half of said lens in order not to reach the light rays which are coming from said light source, from said reflector section and from all reflecting surfaces inside the headlamp to eye level of oncoming traffic users,
wherein the locations of said mirror reflector and said semi-shutter is so adjusted that the light rays are directed towards the lower half-lens through an opening placed between the mirror reflector and lower edge of the semi-shutter and lower half of the lens which projects light rays to only road surfaces.

116. (New) The headlamp according to claim 115, wherein said mirror reflector is disposed against said reflector sections at an angle and it is flat or concave and the mirror reflector is so adjusted to reflect the light rays coming from the light source and reflective surfaces towards the lower half-lens.

117. (New) The headlamp according to claim 115, wherein said half lens which is used for projecting light rays is placed as a front and/or rear half lens according to its location of usage and preferred embodiment.

118. (New) The headlamp according to claim 115, used in double reflector groups with double light pathways, or in triple reflector groups with triple light pathways (clover-leaf shape), or in more reflector groups with more light pathways.

119. (New) The headlamp according to claim 115, wherein said a full lens or half lens is used in place of said lens.

120. (New) The headlamp according to claim 115, wherein said semi-shutter is a movable part and disposed an angle so as to project light rays coming from said shield to lower half lens.

121. (New) The headlamp according to claim 115, wherein inner and/or outer surface of said semi-shutter is reflective.

122. (New) The headlamp according to claim 115, wherein said lens is placed between the reflector sections and said mirror-reflectors, using one or more mirror-reflector within this design operating according to the indirect illumination principle.

123. (New) The headlamp according to claim 115, wherein said lens is a plano convex type having a flat back surface and an aspherical front surface or a spherical, cylindrical shape or a combination thereof, or a Fresnel lens or any other type.

124. (New) A headlamp comprising:
at least one light source;
at least one reflector sections;
at least one lens with a long-distance illumination without glaring effects on concealment of the light source and reflecting surfaces;
at least one mirror reflector,

at least one semi-shutter, which is used for covering upper half of said lens in order not to reach the light rays which are coming from said light source, from said reflector section and from all reflecting surfaces inside the headlamp to eye level of oncoming traffic users; and

wherein the locations of said mirror reflector, said semi-shutter and said reflector section are so adjusted that the light rays are directed towards the lower half-lens through an opening placed between the reflector section and lower edge of the semi-shutter and lower half of the lens which projects light rays to only road surfaces.

125. (New) The headlamp according to claim 124, wherein said mirror reflector is disposed against the reflector section at an angle and it can be flat or concave and the mirror reflector is so adjusted to reflect the light rays coming from the light source and reflective surfaces towards the lower half-lens.

126. (New) The headlamp according to claim 124, wherein said half lens which is used for projecting light rays is placed as a front and/or rear half lens according to its location of usage and preferred embodiment.

127. (New) The headlamp according to claim 124, used in double reflector groups with double light pathways, or in triple reflector groups with triple light pathways (clover-leaf shape), or in more reflector groups with more light pathways.

128. (New) The headlamp according to claim 124, wherein said a full lens or half lens is used in place of said lens.

129. (New) The headlamp according to claim 124, wherein said semi-shutter is a movable part and disposed an angle so as to project light rays coming from said shield to lower half lens.

130. (New) The headlamp according to claim 124, wherein inner and/or outer surface of said semi-shutter is reflective.

131. (New) The headlamp according to claim 124, wherein said lens is placed between the reflector sections and said mirror-reflectors, using one or more mirror-reflector within this design operating according to the indirect illumination principle.

132. (New) The headlamp according to claim 124, wherein said lens is a plano convex type having a flat back surface and an aspherical front surface or a spherical, cylindrical shape or a combination thereof, or a Fresnel lens or any other type.

133. (New) A method for a long-distance illumination without glaring effects that uses a headlamp comprising at least one light source and at least one reflector section, at least a shield, at least one lens, the method comprising the steps of:

covering with a semi-shutter an upper half of said lens in order to prevent for reaching the light rays coming from the light source, said reflector section and all reflecting surfaces inside the headlamp,

locating said shield front of the reflector section in order to prevent the light rays reaching from said reflector section to said lens,

adjusting said semi-shutter and said shield so that they establish a total concealment of said light source, said reflector sections and all reflecting surfaces inside the headlamp from an observer or oncoming traffic users looking above XX horizontal level and the light rays passing through an opening placed between the upper edge of the shield and lower edge of the semi-shutter and reaching to the lower half-lens; and

projecting the light rays to only road surfaces but not projecting them up to the XX horizontal plane that is passing the optical center of the lens by the lower half-lens.

134 (New) A method for a long-distance illumination without glaring effects that uses a headlamp comprising at least one light source and at least one reflector section, at least one lens, the method comprising the steps of:

covering with a semi-shutter an upper half of said lens in order to prevent for reaching the light rays coming from the light source, said reflector sections and all reflecting surfaces inside the headlamp,

locating a lower edge of the reflector section so that it is able to be near the level of optical center of the lens,

adjusting said semi-shutter and said reflector section so that they establish a total concealment of said light source and said reflector sections from an observer or oncoming traffic users looking above XX horizontal level and the light rays passing through an opening placed between the reflector section and lower edge of the semi-shutter and reaching to the lower half-lens; and

projecting the light rays to only road surfaces but not projecting them up to the XX horizontal plane that is passing the optical center of the lens by the lower half-lens.